CITY OF ROCKVILLE
ROCKVILLE, MARYLAND

INVITATION FOR BID #3-07

REMOVAL AND INSTALLATION OF PLAYGROUND EQUIPMENT AT HILLCREST PARK AND SILVER ROCK PARK

ADDENDUM NO. 1

ATTENTION ALL BIDDERS: This addendum is issued to clarify, add to, delete from, correct and/or change the bid documents to the extent indicated and is hereby made a part of the said bid documents. Bidders are required to acknowledge receipt of the Addendum by (1) Listing the number of the Addendum in the space provided on the Bid Proposal Form, or (2) Returning a copy of the Addendum with the bid. Failure to do so may subject your bid to disqualification. The addendum may also be downloaded from the City's website at: www.rockvillemd.gov.

CLARIFICATIONS

BID DUE DATE
The new due date is June 21, 2006, 2:00PM

PROJECT COMPLETION DATE
The new project completion date is October 6, 2006.

REPLACEMENT OF DRAWINGS & SPECIFICATIONS
Hillcrest Park 5 –12. Replace drawing # P05-0450B.dwg with **revised drawing # P05-0450BR2.dwg.**

REPLACEMENT OF DRAWINGS & SPECIFICATIONS
Silver Rock Park 2 – 5. Replace drawing # P05-0451B.dwg with **revised drawing # P05-0451BR.dwg.**

HILLCREST PARK OPTION # 1
Specification for Playground
ADA ACCESSIBLE SAFETY SURFACING
GTIMPAX Poured in Place Rubber Surfacing
Base shall be concrete.
SBR Rubber Impact Course shall be a minimum of 2 1/2"

HILLCREST PARK OPTION # 2
Specification for Playground
ADA ACCESSIBLE SAFETY SURFACING
GT Impax Recycled Bonded Rubber Surfacing
Compacted Stone Base requirment.

A. Enclosure: Stone base course shall be surrounded by a **minimum 16" high X 6" wide Concrete** retaining curb/boarder. Outside edge of retaining curb shall be back filled and overseeded.

B. Enclosure: (page 4 of 8)
Example # 2: NOTE: The GT Impax recycled bonded rubber surfacing **shall** cover the retaining curb/boarder. (The compacted stone base shall be flush/even with the top of the curb.)

C. Enclosure:Drainage: Sub Surface drainage shall be installed by use of perforated pipe or similar system as per specification recommendations.

ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME.

Issued by: *Angela Hughes Byrd, Buyer* *6/9/06*

Acknowledge receipt of this addendum by signing below and returning a copy of the addendum with your bid proposal or acknowledging directly on the bid proposal form.

NAME OF BIDDER:_____

6/2/2006

CITY OF ROCKVILLE – HILLCREST PARK (5-12 AREA) – WRITTEN SPECIFICATIONS

PowerScape Plus Specifications

General System Specifications:

PowerScape® Plus features 5" O.D. uprights with a positive bolt-through PowerLock fastening system. The uprights shall be factory drilled to ensure accurate placement of components and ease of installation. Field drilling and measuring are not required. PowerScape® Plus is a direct bolt system NOT a clamp system. All uprights shall receive factory installed aluminum post caps and shall be shipped with a factory applied label indicating proper surfacing level.

All decks and components shall connect to support posts by means of a through-bolt connection for strong, durable connections. Deck/Collar attachments shall not be acceptable. All climbing attachments shall include a 15"" wide deck entry archway to control deck access to one child at a time and help prevent inadvertent falls.

Manufacturer shall offer the following warranties on the materials and components of its system:

- LIFETIME LIMITED WARRANTY ON SUPPORT POSTS (UPRIGHTS)
- 15 YEAR LIMITED WARRANTY ON PUNCHED STEEL DECKS, PIPES, RAILS, LOOPS AND RUNGS
- 15 YEAR LIMITED WARRANTY ON ROTOMOLDED POLYETHYLENE COMPONENTS
- LIFETIME LIMITED WARRANTY ON POWERLOCK AND HARDWARE

Manufacturer shall be ISO 9001/2000 certified

Manufacturer shall show IPEMA certification of compliance for each component that the product conforms with the requirements of ASTM F1487-01.

General Specifications of Materials:

ENTRY ARCHWAY
All entry archways shall be fabricated from 1 5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing with vertical members fabricated of 1 1/16" O.D. x .075" (15 gauge) wall galvanized steel tubing. The entrance archways shall be an all welded assembly and shall be coated with a custom formula of TGIC polyester powder, after fabrication in conformance with the specifications outlined herein.

HANDHOLDS
All PowerScape Plus handholds shall be fabricated from 1-5/16" O.D., 14 gauge (.083") wall galvanized steel tubing. If vertical spacers are required, they shall be manufactured from 1-1/16" O.D., 15 gauge (.075") wall galvanized steel tubing. The handholds shall be a one-piece welded assembly and shall be coated with a custom formula TGIC polyester powder coating in conformance with the specifications outlined herein.

HARDWARE
All nuts, bolts, screws, inserts, and lockwashers used in the assembly of all play equipment shall be stainless steel, yellow dichromate plated steel, blue-coat plated steel, mechanically galvanized or powder coated/yellow dichromate plated steel. All primary fasteners shall be 304 alloy stainless steel. Fasteners with yellow dichromate treatment have an electro-deposited, 99.9% pure zinc substrate applied from a specially formulated solution sealed with a yellow dichromate top coat designed to work in conjunction with the zinc plating. Yellow dichromate has a 320% longer life to white corrosion and 275% longer to red corrosion than does hot-dip galvanizing. PowerScape Plus stainless steel fasteners shall be button pin-in head, hex socket cap screws with a two-part epoxy locking patch added to the threads. The two-part locking patch shall consist of one part resin and one part catalyst which are activated during installation. After curing, the material shall require a minimum of five times the installation torque to remove the fastener. Manufacturer shall provide special installation tools for pinned fasteners.

POWDER COAT FINISH
Shall be an electrostatically applied custom formula of TGIC polyester powder. All components will be free of sharp edges and excess weld spatter and shall be cleaned in a six stage bath system with an iron phosphate wash, as a rust inhibitor, and a sealer to prevent flash rusting before coating. The coating shall have a super tough finish with maximum exterior durability and will have superior adhesion characteristics. Typical characteristics are: 3.0 - 5.0 mil thickness and oven cured between 375 to 425 degrees Fahrenheit. Pencil Hardness H (ASTM D-3363), Impact (ASTM D-2794- 69), Wedge Bend (ASTM D-522-68), Adhesion (Cross Hatch ASTM D-3359 & Knife Scratch ASTM D-2197), Environmental (Stain Resistance ASTM D-1308, Humidity ASTM D-2247 - 87, Salt Spray ASTM B-117 & Fadometer 300 hrs with no loss of gloss), Over-bake Stability 100% at 400 degrees Fahrenheit.

ROTATIONALLY MOLDED PRODUCTS
All polyethylene shall be linear low-density material with UV-stabilized color and an anti-static compound additive. All rotationally molded products shall meet or exceed the following specifications: ASTM D-1248, type 2, class A and Federal specification LP-390C, type 1, class M, grade 2, category 3; Density (ASTM D- 1505); Brittleness Temperature (ASTM D-746); Tensile Values (ASTM D-638); Flexural Modulus (ASTM D-790);Heat Distortion (ASTM-648); Low Temperature Impact (ARM-STD).

Uprights and Upright Accessories:

POWERLOCK CONNECTION
The Patented assemblies shall incorporate two die cast aluminum parts, in a distinctive purpose mounting system that allows a rung panel to mount to the upright. The Powerlock connector will have a matching counterpart for flat panel connections. Each is bolted directly into the upright post through a factory located and installed connection and designed to eliminate exposed hardware and protrusions. Each shall be die cast of 383 aluminum alloy, to resist corrosion. Minimum tensile strength shall be 45,000 psi, minimum yield strength shall be 22,000 psi. Every Powerlock shall be anodized for maximum protection. Powerlock mounting hardware shall not be exposed, virtually eliminating tampering by vandals. All connectors shall be coated with a custom formula of TGIC polyester powder coating, in conformance with the specifications outlined herein.

UPRIGHTS, ALUMINUM
Shall be 5"outside diameter tubing, 1/8" wall thickness, extruded from 6005-T5 aluminum alloy conforming to ASTM-B-221. Minimum yield strength shall be 35,000 psi and minimum tensile strength shall be 38,000 psi. All upright posts shall have a finished grade line marking to indicate the correct playground safety surface level. All upright posts shall be coated with a custom formula TGIC polyester powder coating in conformance with the specifications outlined herein.

UPRIGHTS, STEEL
Shall be 5" outside diameter, 11 gauge (.120") galvanized round tubing, manufactured to ASTM A-500 Grade B tolerances from cold-formed steel conforming to ASTM A-569 Sheet Spec for steel coil. Minimum yield strength shall be 50,000 psi and minimum tensile strength shall be 55,000 psi.
The exterior surface is hot dip galvanized, chromate conversion coated, and a clear high performance organic polymer is applied. The inside diameter has 81% minimum zinc rich primer capable of providing excellent rust protection and fabrication characteristics. All coatings are applied inside and out after welding for superior corrosion protection throughout. Exterior surface galvanizing zinc purity is 99% as per ASTM B-6 high grade and special high grade. Galvanizing coverage shall demonstrate the ability to exceed 1000 hours salt spray corrosion exposure in accordance with ASTM B-117. Internal surface zinc rich 81% minimum zinc dust content in organic resin, as per ASTM F-1234, Section 5.2.4, Type D. All upright posts shall have a finished grade line marking to indicate the correct playground safety surface level. All upright posts shall be coated with a custom formula TGIC polyester powder coating in conformance with the specifications outlined herein.

UPRIGHT CAPS
The standard upright cap shall be an aluminum cap, cast from a 383 alloy, powder coated to match the upright. Every upright cap shall receive a primer coat for maximum protection. All upright caps are permanently installed at the factory using aluminum self-sealing rivets.

Punched Steel & Coated Components:

PUNCHED STEEL DECKS AND PVC COATED COMPONENTS
All punched steel products shall be fabricated from 11 gauge punched steel with a protective p&o finish. Coated products shall consist of a welded assembly with an oven cured matte finish polyvinyl chloride (PVC) coating with a minimum coating thickness of .080". All decks shall be exclusively dipped utilizing the DuraWear process with an extra thick coating on the top of the deck. The PVC coating shall have a hardness of Shore A 83 +/-5 normal durometer range. This material is classed as "Self Extinguishing", meets or exceeds automotive specifications NVSS302, and contains ultraviolet inhibitors to help prolong the life of the coating. For ADA Ramp Accessible decks and ramps, the hole shall measure 1/4" diameter after coating. For standard decks and ramps, the hole size shall measure 1 1/4" diameter after coating.

DECKS, SQUARE
Shall have a minimum surface area of 2,381 square inches, maintaining a full 49" center to center spacing on the upright posts. The 49" square deck shall be fabricated in conformance with the punched steel specifications outlined herein. The deck frame shall be fabricated from 3/16" x 3-1/2" hot rolled steel with corner supports fabricated from 1/4" x 3-1/2" hot rolled steel. Intermediate supports, fabricated from 1/8" x 2-1/2" hot rolled steel, shall be notched and welded at the intersections forming a rigid 12" support grid underneath the entire deck surface. The deck shall be a one-piece welded assembly, coated after fabrication with an oven cured matte finish polyvinyl chloride (PVC) coating in accordance with the specifications herein. The square deck shall be directly bolted to the upright posts with eight 3/8" diameter button-pin-in-head, hex socket cap screws in accordance with the hardware specifications herein.

DECKS, TRIANGULAR
Shall have a minimum surface area of 1,039 square inches, maintaining a full 49" center to center spacing on the upright posts. The triangular platform shall be fabricated in conformance with the punched steel specifications outlined herein. The deck frame shall be fabricated from 3/16" x 3-1/2" hot rolled steel with corner supports fabricated from 1/4" x 3-1/2" hot rolled steel. Intermediate supports, fabricated from 1/8" x 2-1/2" hot rolled steel, shall be welded at the intersections forming a rigid support grid underneath the deck surface. The deck shall be a one-piece welded assembly, coated after fabrication with an oven cured matte finish polyvinyl chloride (PVC) coating in accordance with the specifications herein. Each triangular deck shall be directly bolted to the upright posts with six 3/8" diameter button-pin-in-head, hex socket cap screws in accordance with the hardware specifications herein.

STEP PLATFORMS
The step platforms shall be made from 11 gauge punched steel with a protective P&O finish in conformance with the specifications outlined herein. The step platforms shall be a one-piece welded assembly finished with the matte PVC coating per the specifications herein. Handrails and attachment rails shall be fabricated from 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing, with supports fabricated from 1-1/16" O.D. x 15 gauge (.075" thick) galvanized steel tubing and 2" square x 3/16" wall steel tubing. Handholds, and attachment rails shall be all-welded assemblies and shall be coated after fabrication with a custom formula of TGIC polyester powder in conformance with the specifications outlined herein.

Bridges:

FUNNEL BRIDGE
The bridge sections shall be fabricated from punched steel in conformance with the specifications outlined herein. Each bridge section shall be a one- piece welded assembly finished with the matte PVC coating per the specifications herein. The bridge frame shall be fabricated from 3/16" x 3-1/2" hot rolled steel with the intermediate supports fabricated from 1/8" x 1" hot rolled steel. Funnel bridge protective barriers shall be an all welded construction of a formed 1-5/8" O.D. x .083" (14 gauge) wall galvanized steel tubing and 1-1/16" O.D. x .075" (15 gauge) wall galvanized steel tubing vertical rungs. The protective barrier assembly shall be coated with a custom formula of TGIC polyester powder, after fabrication in conformance with the specifications outlined herein. The PowerScape Plus funnel bridge shall include two entry archways in accordance with the specifications herein

HI-WAVE & LO-WAVE BRIDGE
The bridges shall be fabricated from punched steel in conformance with the specifications outlined herein. Each bridge shall be a one-piece welded assembly finished with the matte PVC coating per the specifications herein. The bridge frame shall be fabricated from 3/16" x 3-1/2" hot rolled steel with the intermediate supports fabricated from 1/8" x 2-1/2" hot rolled steel. Arch bridge protective barriers and guardrails shall be an all welded construction of a formed 1-5/8" O.D. x .083" (14 gauge) wall galvanized steel tubing and 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing vertical rungs. The protective barriers and guardrails assembly shall be coated with a custom formula of TGIC polyester powder, after fabrication in conformance with the specifications outlined herein.

MINI-ARCH BRIDGE
The bridge section shall be fabricated from punched steel in conformance with the specifications outlined herein. The bridge section shall be a one-piece welded assembly finished with the matte PVC coating per the specifications herein. The bridge frame shall be fabricated from 3/16" x 3-1/2" and 1/4" x 3-1/2" hot rolled steel. Mini-Arch bridge protective or guardrail barriers shall be an all-welded construction of a formed 1-5/8" O.D. x .083" (14 gauge) wall galvanized steel tubing and 1-1/16" O.D. x .075" (15 gauge) wall galvanized steel tubing vertical rungs. The protective barrier or guardrail assembly shall be coated, after fabrication, with a custom formula of TGIC polyester powder in conformance with the specifications outlined herein.

Climbers:

CARGO NET WALL
The net assembly shall be constructed from galvanized, 7/32", 4/0 welded link chain. Cross members for the net shall be fabricated from 1-1/16" x .075" (15 gauge) wall galvanized steel tubing. The net shall be a welded assembly. The net assembly shall be coated in conformance with the PVC specifications outlined herein. The net assembly shall attach to the top rail using 3/8" hardware. The anchoring system shall consist of formed 1-1/16" x .075" (15 gauge) wall galvanized steel tubing. The top rail shall be an all welded construction with a custom formula of TGIC polyester powder coating, after fabrication, in conformance with the specifications outlined herein.

MEGAROCK & CASTLE ROCK CLIMBERS
Shall be color impregnated rotationally molded linear low density polyethylene conforming to the specifications outlined herein. The double wall part shall have a minimum wall thickness of 3/8". MegaRock shall pass a weight test with a static load of more than four thousand (4000) pounds. The climber is a spherical section that shall be bolted up singularly or in dual configurations to adjacent 5' high platforms. MegaRock is an amorphously shaped structure resembling a multi-tiered mountain face with hundreds of different climbing paths to the peak. Three (3) molded-in handholds are dispersed along the face of the structure. A funneling system incorporated into the top face deters users from straying too close to the edge, and "funnels" them towards the deck. The underside of the wall is a cave with a molded-in dinosaur fossil relief of an adolescent Albertosaurus. The texture of the top face and cave of MegaRock resembles actual rock and provides children with the tactile sensation of "being in the wild." The part shall be secured to the ground with footbuck supports.

PowerScape Plus MegaRock shall include an two handholds in accordance with the specifications herein. PowerScape Plus Castle Rock shall include a two-color theme panel which has the appearance of a stone castle entrance. The materials for this entrance panel shall comply with the specifications for POWERSCAPE PLUS HDPE DISCOVERY PANELS herein.

MegaRock Technical Specifications
Deck Height: 5'
Width-Peak: 48 7/8"
Width-Base: 114 5/8"
Plateaus: 17
of Climbing Paths: 100's
Molded-in Hand Holds: 3

-The design has been approved by an independent safety consultant
-One-piece rotationally molded design
-Flush mounts with deck
-Each MegaRock is completely modular with another MegaRock within a dome configuration
-Authentic molded-in Albertosaurus fossil on cave portion (backside) of
-MegaRock provides children with another "play while you learn" activity
-Molded-in texture gives MegaRock a genuine rock-like feel

TWISTER CLIMBER
The twister climber inner and outer rails shall be fabricated from 1 5/8" O.D. x .083" (14 gauge) wall galvanized steel tubing. The rungs shall be fabricated from 1-1/16" O.D. x .075" (15 gauge) wall galvanized steel tubing. The twister climber assembly shall be an all welded assembly and shall be coated after fabrication with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein. PowerScape Plus twister climber shall include an entry archway in accordance with the specifications herein.

Upper Body Development Components:

CRUNCH BAR
Shall be fabricated from 1-1/16" O.D. x .075"(15 gauge) wall galvanized steel tubing and shall be coated after fabrication with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein.

SWIVEL MEISTER
The Swivel Meister shall consist of a footboard connected to 9 links of PVC coated galvanized, 7/32", 4/0 link chain. The chain is connected to cast aluminum swing hangers that are secured between two uprights with steel mounting tabs. The uprights shall be coated after fabrication with a custom formula of TGIC polyester powder in conformance with the specifications outlined herein. The Swivel Meister has two handholds, one located on each upright. Each footboard shall be 5" wide x 20" long x 1 1/16" deep. The footboard is comprised of an internal "C"-channel insert which is extruded from 6005-T5 aluminum (ASTM B221), and a supple outer coating made from tough EPDM rubber with a 58-62 durometer rating. The rubber coating is hermetically molded around the aluminum insert providing an attractive slip-resistant surface; air cells are molded into the rubber coating along the wide sides of the footboard and serve as cushions.

Panels:

DOUBLE SEAT
The seat rail for the Double Seat shall be fabricated from 1 7/8" OD x .095" (13 gauge) galvanized pipe, galvanized steel seat sockets and formed steel mounting plates. It shall be a welded one-piece assembly. Two 13 ½" diameter cast aluminum seats are provided and are attached to the support assembly by ½" set screws. The seat rail and the seats shall be coated after fabrication with a custom formula of TGIC polyester powder in conformance with the specifications outlined herein. The seat rail shall be bolted directly to two uprights with eight 3/8" stainless steel bolts; four bolts attach through the mounting plate provided on each end of the rail.

INTERACTIVE PANELS
The panel, cap and game pieces shall be constructed from color impregnated rotationally molded linear low density polyethylene with the appropriate graphics rotationally molded into the material. The game pieces shall include molded-in graphics on both sides. The rungs shall be fabricated of 1-1/16" O.D. x .075" (15 gauge) wall galvanized steel tubing. All rotationally molded polyethylene products shall conform to the specifications outlined herein.

METAL RUNG ENCLOSURES
The rung enclosure shall be fabricated of 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing. The vertical rungs shall be fabricated of 1-1/16" O.D. x .075" (15 gauge) wall galvanized steel tubing. The rung enclosure shall be an all welded assembly and shall be coated after fabrication with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein.

Slides:

CYBERSLIDE
This patented one piece, rotationally molded slide shall feature double-wall construction and shall be manufactured from color-impregnated linear low density polyethylene and shall conform to the roto-mold specifications outlined herein. The overall nominal width of the one-piece slide is 21" with a nominal length of 163 1/2". The exit region shall be upheld by supports, which are molded into the slide. The exit height of the slide shall be no more than 14 3/4". The platform height shall be 8'-0". A matching double-walled hood is provided at the entrance and shall be molded from the same material as the slide bedway. Both the molded slide and hood shall have images resembling the internal parts of a space ship molded into the outer surfaces for imaginative play. The underside of the slide shall have similar images molded into the surface to provide both imaginative play and tactile stimulation to users at ground level. The CyberSlideä shall have a one-piece welded steel center support assembly; it shall be coated after fabrication with a custom formula of TGIC polyester powder, in conformance with the specifications outlined herein. An optional dual rotating game apparatus consists of nine roto-molded game pieces attached to a frame. The frame shall be a one-piece welded assembly and shall be coated after fabrication with a custom formula of TGIC polyester powder, in conformance with the specifications outlined herein.

FLIP SLIDE
The one-piece slide shall be color impregnated linear low density polyethylene and shall conform to the rotationally molded specifications outlined herein. The slide can be"flipped over" to be right or left exiting. The banked off-set shall be approximately 20". The seating and run-out areas shall be a minimum of 12" long to slow the user for proper exit. The mounting bracket shall be fabricated of 3/16" x 2-1/2" hot rolled steel, PVC coated in conformance with the specifications herein. Slide enclosure and foot buck assembly shall be coated after fabrication with a custom formula of TGIC polyester powder, in conformance with the specifications outlined herein.

WILDSLIDE
This multi-sectional rotationally molded open-bedway slide shall be manufactured from color impregnated linear low density polyethylene and shall conform to the rotationally molded product specifications outlined herein. Entry to the slide incorporates a tunnel access. The slide bedway shall have a 20" inside diameter on a 40° maximum slope so that each section will decrease in height by 12". The Double Entrance includes a triangular shaped platform filler that shall be fabricated from 11 gauge punched steel with a protective p&o finish in conformance with the specifications outlined herein. The platform filler shall be a one-piece assembly finished with the matte PVC coating per the specifications herein. The slides will be offered on 4', 5', 6', 7', and 8' deck heights. Entrance, Double Entrance, 1'Exit, 2' Exit, Straight, Spiral, Left, and Right sections shall be molded so that they overlap externally at each junction and all hardware connections are located on the outside of the sections. All sections shall be of double wall construction with a nominal wall thickness of 1/4". The exit sections features a molded-in pedestal. Slides of 5',6', 7', and 8' deck heights will use 3' or 4' slide supports.

TuffClad Series

BENCH
FRAME: The frames shall be fabricated of 2-3/8" O.D. galvanized pipe.

SEAT AND BACK: The seat shall be punched steel with a plastisol coating.

HARDWARE: All nuts, bolts, screws, inserts, and lockwashers used in the assembly of all equipment, shall be stainless steel, yellow dichromate plated steel, blue-coat plated steel, mechanically galvanized or powder coated/yellow dichromate plated steel. All primary fasteners shall be 300 series stainless steel. Fasteners with yellow dichromate treatment have an electro deposited, 99.9% pure zinc substrate applied from a specially formulated solution sealed with a yellow dichromate top coat designed to work in conjunction with the zinc plating. Yellow dichromate has a 320% longer life to white corrosion and 275% longer to red corrosion than does hot-dip galvanizing.

6/2/2006

CITY OF ROCKVILLE – SILVER ROCK PARK (2-5) AREA – WRITTEN SPECIFICATIONS

Play Curbs

PLAYCURB
Shall be a one-piece rotationally molded assembly manufactured from color impregnated linear low density polyethylene and shall conform to the specification for Rotationally Molded Products contained herein. Black PlayCurbs shall be of 100% pre-consumer recycled material.

ACCESSIBLE PLAY CURB
Recycled Accessible Play Curb: 4'-4" wide x 8" high x 5' 3 3/16" long rotational molded. 100% recycled/reclaimed linear low density polyethylene. Walls are 1/4" thick.

Color Option Accessible Play Curb: 4'-4" wide x 8" high x 5' 3 3/16" long rotational molded linear low density polyethylene. Walls are 1/4" thick.

Recycled Adapter: 0'-3 1/2" Wide x 12" High x 1'-4" Long rotational molded. 100% recycled/reclaimed linear low density polyethylene. Walls are 3/16" thick.

Color Option Adapter: 0'-3 1/2" Wide x 12" High x 1'-4" Long rotational molded linear low density polyethylene. Walls are 3/16" thick.

HARDWARE: All nuts, bolts, screws, inserts, and lockwashers used in the assembly of all play equipment, shall be service condition SC 2 (Moderate) Type II zinc plated with a yellow chromate conversion coating. (ASTM B-633-85)

PowerScape Plus Specifications

General System Specifications:

PowerScape® Plus features 5" O.D. uprights with a positive bolt-through PowerLock fastening system. The uprights shall be factory drilled to ensure accurate placement of components and ease of installation. Field drilling and measuring are not required. PowerScape® Plus is a direct bolt system NOT a clamp system. All uprights shall receive factory installed aluminum post caps and shall be shipped with a factory applied label indicating proper surfacing level.

All decks and components shall connect to support posts by means of a through-bolt connection for strong, durable connections. Deck/Collar attachments shall not be acceptable. All climbing attachments shall include a 15"" wide deck entry archway to control deck access to one child at a time and help prevent inadvertent falls.

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- 15 YEAR LIMITED WARRANTY ON ROTOMOLDED POLYETHYLENE COMPONENTS
- LIFETIME LIMITED WARRANTY ON POWERLOCK AND HARDWARE

Manufacturer shall be ISO 9001/2000 certified

Manufacturer shall show IPEMA certification of compliance for each component that the product conforms with the requirements of ASTM F1487-01.

General Specifications of Materials:

ENTRY ARCHWAY
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HARDWARE
All nuts, bolts, screws, inserts, and lockwashers used in the assembly of all play equipment shall be stainless steel, yellow dichromate plated steel, blue-coat plated steel, mechanically galvanized or powder coated/yellow dichromate plated steel. All primary fasteners shall be 304 alloy stainless steel. Fasteners with yellow dichromate treatment have an electro-deposited, 99.9% pure zinc substrate applied from a specially formulated solution sealed with a yellow dichromate top coat designed to work in conjunction with the zinc plating. Yellow dichromate has a 320% longer life to white corrosion and 275% longer to red corrosion than does hot-dip galvanizing. PowerScape Plus stainless steel fasteners shall be button pin-in head, hex socket cap screws with a two-part epoxy locking patch added to the threads. The two-part locking patch shall consist of one part resin and one part catalyst which are activated during installation. After curing, the material shall require a minimum of five times the installation torque to remove the fastener. Manufacturer shall provide special installation tools for pinned fasteners.

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UPRIGHTS, STEEL
Shall be 5" outside diameter, 11 gauge (.120") galvanized round tubing, manufactured to ASTM A-500 Grade B tolerances from cold-formed steel conforming to ASTM A-569 Sheet Spec for steel coil. Minimum yield strength shall be 50,000 psi and minimum tensile strength shall be 55,000 psi.
The exterior surface is hot dip galvanized, chromate conversion coated, and a clear high performance organic polymer is applied. The inside diameter has 81% minimum zinc rich primer capable of providing excellent rust protection and fabrication characteristics. All coatings are applied inside and out after welding for superior corrosion protection throughout. Exterior surface galvanizing zinc purity is 99% as per ASTM B-6 high grade and special high grade. Galvanizing coverage shall demonstrate the ability to exceed 1000 hours salt spray corrosion exposure in accordance with ASTM B-117. Internal surface zinc rich 81% minimum zinc dust content in organic resin, as per ASTM F-1234, Section 5.2.4, Type D. All upright posts shall have a finished grade line marking to indicate the correct playground safety surface level. All upright posts shall be coated with a custom formula TGIC polyester powder coating in conformance with the specifications outlined herein.

UPRIGHT CAPS
The standard upright cap shall be an aluminum cap, cast from a 383 alloy, powder coated to match the upright. Every upright cap shall receive a primer coat for maximum protection. All upright caps are permanently installed at the factory using aluminum self-sealing rivets.

Punched Steel & Coated Components:

PUNCHED STEEL DECKS AND PVC COATED COMPONENTS
All punched steel products shall be fabricated from 11 gauge punched steel with a protective p&o finish. Coated products shall consist of a welded assembly with an oven cured matte finish polyvinyl chloride (PVC) coating with a minimum coating thickness of .080". All decks shall be exclusively dipped utilizing the DuraWear process with an extra thick coating on the top of the deck. The PVC coating shall have a hardness of Shore A 83 +/-5 normal durometer range. This material is classed as "Self Extinguishing", meets or exceeds automotive specifications NVSS302, and contains ultraviolet inhibitors to help prolong the life of the coating. For ADA Ramp Accessible decks and ramps, the hole shall measure 1/4" diameter after coating. For standard decks and ramps, the hole size shall measure 1 1/4" diameter after coating.

DECKS, SQUARE
Shall have a minimum surface area of 2,381 square inches, maintaining a full 49" center to center spacing on the upright posts. The 49" square deck shall be fabricated in conformance with the punched steel specifications outlined herein. The deck frame shall be fabricated from 3/16" x 3-1/2" hot rolled steel with corner supports fabricated from 1/4" x 3-1/2" hot rolled steel. Intermediate supports, fabricated from 1/8" x 2-1/2" hot rolled steel, shall be notched and welded at the intersections forming a rigid 12" support grid underneath the entire deck surface. The deck shall be a one-piece welded assembly, coated after fabrication with an oven cured matte finish polyvinyl chloride (PVC) coating in accordance with the specifications herein. The square deck shall be directly bolted to the upright posts with eight 3/8" diameter button-pin-in-head, hex socket cap screws in accordance with the hardware specifications herein.

TRANSFER PLATFORM WITH PUNCHED STEEL
Platform and step shall be made from 11 gauge punched steel metal in conformance with the specifications outlined herein. Platform and step shall each be a one-piece welded assembly. The platform frame shall be fabricated from 3/8" x 3-1/2" hot rolled steel. Handholds shall be fabricated from 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing with vertical members fabricated of 2" square x 3/16" wall steel tubing. The corner post assembly shall be fabricated from 2 3/8" O.D. x .095" (13 gauge) wall galvanized steel tubing with handholds made from 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing. Both the corner post and the handholds shall be all-welded assemblies and shall be coated with a custom formula of TGIC polyester powder in conformance with the specifications outlined herein, after fabrication. Step assembly frame shall be made from 10 gauge (.135" thick) hot rolled flat steel. The step assembly and corner post assembly can be installed on either the right or left side of the platform, offering installation flexibility. Note: The PowerScape Plus Transfer Point when used in Step assembly frame shall be made from 10 gauge (.135" thick) hot rolled flat steel. The step assembly and corner post assembly can be installed on either the right or left side of the platform, offering installation flexibility.

STEP PLATFORMS
The step platforms shall be made from 11 gauge punched steel with a protective P&O finish in conformance with the specifications outlined herein. The step platforms shall be a one-piece welded assembly finished with the matte PVC coating per the specifications herein. Handrails and attachment rails shall be fabricated from 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing, with supports fabricated from 1-1/16" O.D. x 15 gauge (.075" thick) galvanized steel tubing and 2" square x 3/16" wall steel tubing. Handholds, and attachment rails shall be all-welded assemblies and shall be coated after fabrication with a custom formula of TGIC polyester powder in conformance with the specifications outlined herein.

Roofs and Arches:

DOME ROOF
Roof shall bolt directly to the four uprights and be one-piece, double-wall rotationally molded linear low-density polyethylene conforming to the specifications outlined herein.

Bridges:

SUSPENSION BRIDGE
The footboards shall be fabricated from punched steel in conformance with the specifications outlined herein. The footboard frame shall be fabricated from 3/16" x 2-1/2" hot rolled steel with the intermediate supports fabricated from 3/16" x 1" hot rolled steel. Each footboard shall be a one-piece welded assembly finished with the matte PVC coating per the specifications herein. Suspension bridge barrier shall be an all welded construction of a formed 1-5/8" O.D. x .083" (14 gauge) wall galvanized steel tubing rails and 1-1/16" O.D. x .075" (15 gauge) wall galvanized steel tubing rungs. The barrier assembly shall be coated, after fabrication, with a custom formula of TGIC polyester powder in conformance with the specifications outlined herein.

Climbers:

CARGO NET WALL
The net assembly shall be constructed from galvanized, 7/32", 4/0 welded link chain. Cross members for the net shall be fabricated from 1-1/16" x .075" (15 gauge) wall galvanized steel tubing. The net shall be a welded assembly. The net assembly shall be coated in conformance with the PVC specifications outlined herein. The net assembly shall attach to the top rail using 3/8" hardware. The anchoring system shall consist of formed 1-1/16" x .075" (15 gauge) wall galvanized steel tubing. The top rail shall be an all welded construction with a custom formula of TGIC polyester powder coating, after fabrication, in conformance with the specifications outlined herein.

CLOVER LEAF CLIMBER
Shall be fabricated from 1-5/8" O.D. x .083" (14 gauge) wall galvanized steel tubing upright and step rungs of 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing. The Clover climber shall have a handhold of 1.029" x .083" (14 gauge) wall galvanized steel tubing. The Clover climber assembly shall be coated, after fabrication, with a custom formula of TGIC polyester powder in conformance with the specifications outlined herein. PowerScape Plus clover climber shall include an entry archway in accordance with the specifications herein. Steel insert shall be fabricated from 11 gauge (.120") hot rolled steel. Decorative designs shall be laser cut to produce accurate, burr-free cut-outs.

WAVE CLIMBER
This patent pending one-piece climber shall be color impregnated linear low density polyethylene and shall conform to the rotationally molded specifications outlined herein. The climber utilizes "waves" and "bumps" to allow the user to ascend and descend at their level of ability. The mounting bracket shall be fabricated of 3/16" x 2-1/2" hot rolled steel. The mounting bracket, enclosure, and foot buck assemblies shall be coated with a custom formula of TGIC polyester powder, after fabrication in conformance with the specifications outlined herein

WAVY CLIMBER
Wavy climber shall be a one-piece welded assembly with the center rail fabricated from 2-3/8" O.D. x .095" (13 gauge) wall galvanized steel tubing . The climbing rungs shall be fabricated from 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing. Mounting bracket shall be fabricated from 3/16" x 3-1/2" hot rolled flat steel with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein.

VERT WALL CLIMBER
Shall be two, one-piece construction of color impregnated rotationally molded linear low density polyethylene pieces with a 1/4" nominal wall thickness. The Grips are four organic variations injection molded of polyethylene. The Mounting Bracket shall be fabricated from 1-1/16" O.D. x .075" (15 gauge), 1-5/16" O.D. x .083" (14 gauge), and 1 5/8" O.D. x .083" (14 gauge) wall galvanized steel tubing. The Mounting Bracket shall be an all welded construction and shall be coated with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein. The Struts shall be fabricated from 1 7/8" O.D. x .095" (13 gauge) wall galvanized steel tubing and shall be coated with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein. All rotationally molded polyethylene products shall conform to the rotationally molded specifications outlined herein.

Upper Body Development Components:

CRUNCH BAR
Shall be fabricated from 1-1/16" O.D. x .075"(15 gauge) wall galvanized steel tubing and shall be coated after fabrication with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein.

TURNING BAR
The Turning Bar shall consist of an L-Shaped length of 1.66" OD x .083" (14 gauge) pipe. It shall be coated after fabrication with a custom formula of TGIC polyester powder in conformance with the specifications outlined herein. The Turning Bar is bolted to an upright with a mounting tab that is welded to the end of the pipe.

Panels:

INTERACTIVE PANELS
The panel, cap and game pieces shall be constructed from color impregnated rotationally molded linear low density polyethylene with the appropriate graphics rotationally molded into the material. The game pieces shall include molded-in graphics on both sides. The rungs shall be fabricated of 1-1/16" O.D. x .075" (15 gauge) wall galvanized steel tubing. All rotationally molded polyethylene products shall conform to the specifications outlined herein.

METAL RUNG ENCLOSURES
The rung enclosure shall be fabricated of 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing. The vertical rungs shall be fabricated of 1-1/16" O.D. x .075" (15 gauge) wall galvanized steel tubing. The rung enclosure shall be an all welded assembly and shall be coated after fabrication with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein.

Slides:

WILDSLIDE
This multi-sectional rotationally molded open-bedway slide shall be manufactured from color impregnated linear low density polyethylene and shall conform to the rotationally molded product specifications outlined herein. Entry to the slide incorporates a tunnel access. The slide bedway shall have a 20" inside diameter on a 40° maximum slope so that each section will decrease in height by 12". The Double Entrance includes a triangular shaped platform filler that shall be fabricated from 11 gauge punched steel with a protective p&o finish in conformance with the specifications outlined herein. The platform filler shall be a one-piece assembly finished with the matte PVC coating per the specifications herein. The slides will be offered on 4', 5', 6', 7', and 8' deck heights. Entrance, Double Entrance, 1'Exit, 2' Exit, Straight, Spiral, Left, and Right sections shall be molded so that they overlap externally at each junction and all hardware connections are located on the outside of the sections. All sections shall be of double wall construction with a nominal wall thickness of 1/4". The exit sections features a molded-in pedestal. Slides of 5',6', 7', and 8' deck heights will use 3' or 4' slide supports.

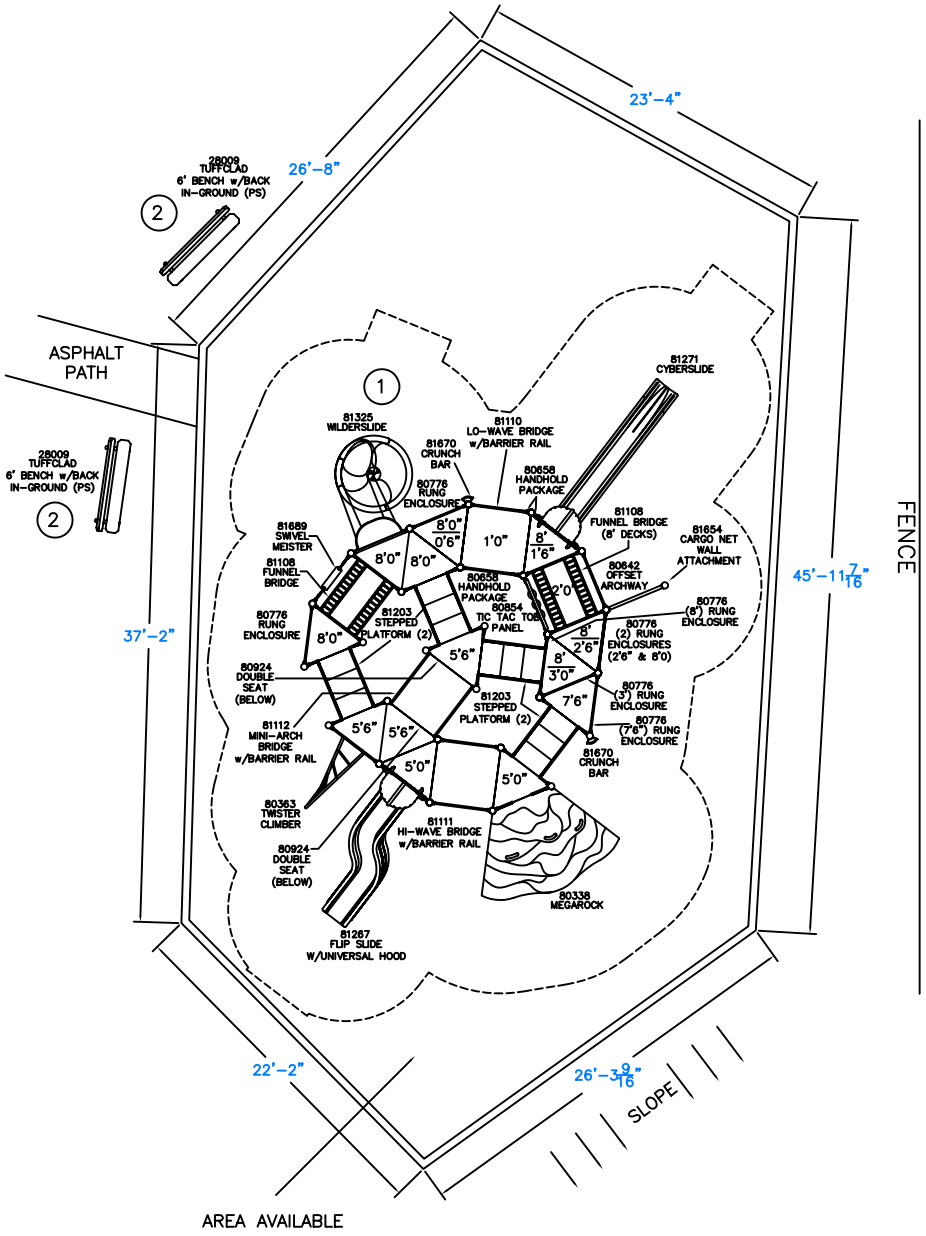
ZIP SLIDES (SINGLE & DOUBLE BEDWAY, AND RUMBLE & ROLL)
Zip Slides and hoods shall be color impregnated linear low-density polyethylene and shall conform to the rotationally molded specifications outlined herein with double wall construction molded to a minimum .25" wall thickness. Single bedway Zip Slides shall have a minimum inside bed width of 17.5" while double bedway Zip Slides shall have a minimum inside bed width of 16.5" on each bedway. Outside rails are at least 7" high when measured from the centerline of the bedway surface. The angle of descent shall be no greater than 50°. Each Zip Slide works in conjunction with a rotationally molded hood that has an integrated cross bar which force users to a seated position. The exit section of the bedway shall have a minimum 40" radius for a smooth transition from the slide chute to the run-out area. The run-out shall be angled at a maximum of 4° with an integrated drain at 5° to reduce pooling of water. Zip Slides bolt directly to the deck and to the slide hood.

TuffClad Series

BENCH
FRAME: The frames shall be fabricated of 2-3/8" O.D. galvanized pipe.

SEAT AND BACK: The seat shall be punched steel with a plastisol coating.

HARDWARE: All nuts, bolts, screws, inserts, and lockwashers used in the assembly of all equipment, shall be stainless steel, yellow dichromate plated steel, blue-coat plated steel, mechanically galvanized or powder coated/yellow dichromate plated steel. All primary fasteners shall be 300 series stainless steel. Fasteners with yellow dichromate treatment have an electro deposited, 99.9% pure zinc substrate applied from a specially formulated solution sealed with a yellow dichromate top coat designed to work in conjunction with the zinc plating. Yellow dichromate has a 320% longer life to white corrosion and 275% longer to red corrosion than does hot-dip galvanizing.



EQUIPMENT LIST				
ITEM	QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION
1	1	GAMETIME	CUSTOM	POWERSCAPE PLUS MODIFIED PLAY STRUCTURE FOR AGES 5–12
2	2	GAMETIME	28009	TUFFCLAD 6' BENCH WITH BACK IN–GROUND MOUNT

ADA ACCESSIBLE SAFETY SURFACING

SURFACING OPTION #1
- 2,057 SQUARE FEET REQUIRED
- GTIMPAX POURED-IN-PLACE RUBBER SURFACING
- 1/2" EPDM WEAR COURSE (50% COLOR/ 50% BLACK)
- 1-1/2" SBR RUBBER IMPACT COURSE (3-1/2" TOTAL THICKNESS)
- INSTALLED OVER NEW 4" THICK CONCRETE BASE PAD

ADA ACCESSIBLE SAFETY SURFACING

SURFACING OPTION #2
- 2,057 SQUARE FEET REQUIRED
- GTIMPAX BONDED RUBBER SURFACING
- 3-1/2" THICKNESS
- (1) LAYER OF GEOTEXTILE FABRIC OVER STONE BASE
- 8' MAXIMUM FALL HEIGHT

SCALE
1 5 10 15

THE PLAY COMPONENTS IDENTIFIED IN THIS PLAY AREA ARE IPEMA CERTIFIED. THE USE AND LAYOUT OF THESE COMPONENTS CONFORM TO THE REQUIREMENTS OF ASTM F1487-01.

City of Rockville
Hillcrest Park
Montgomery County
Ages 5-12 Play Area

THE ESTIMATED CAPACITY FOR THIS POWERSCAPE PLUS PLAY STRUCTURE IS 100-10 CHILDREN AGES 5-12

PROVIDED BY:

WEST RECREATION, INC.
P.O. BOX 487
QUEENSTOWN, MD 21658
PHONE: (800) 233-0529
FAX: (410) 827-8855

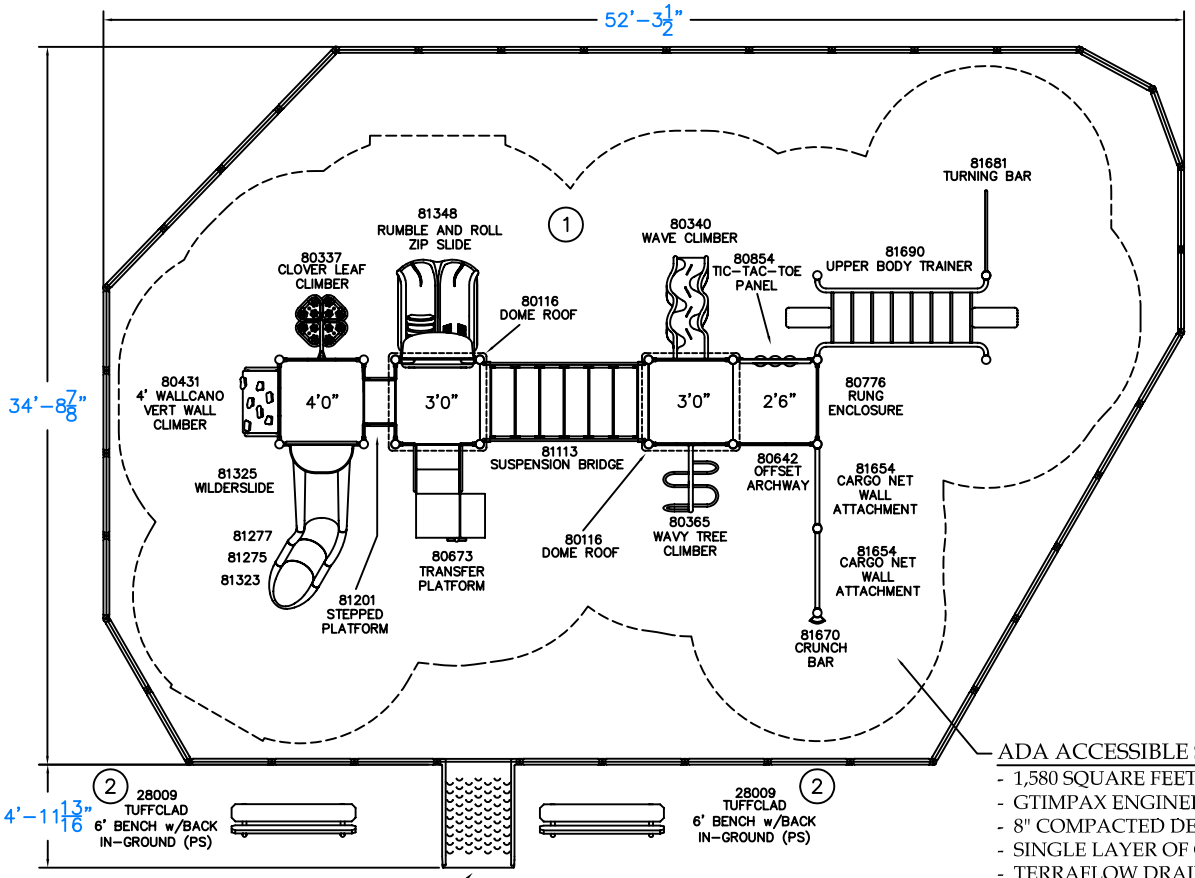
No.	Revision	Date

This play equipment is recommended for children ages 5 - 12 .

Soft, resilient surfacing should be placed in the use zones of all equipment, as specified for each type of equipment, and at depths to meet the critical fall heights as specified by the U.S. consumer Product Safety Commission, ASTM standard F 1487 and Canadian Standard CAN/CSA-Z-614.

GameTime — A PLAYCORE COMPANY — Enriching Childhood Through Play. ISO 9001 CERTIFIED

Drawn By: JLO	Scale: AS SHOWN
Date: 06/02/06	
Drawing Name: P05-0450BR2.dwg	



GAMETIME PLAYCURB BORDER SYSTEM:
- (37) MODEL #4850 - 4' X 4" X 8" TALL STRAIGHT CURBS (BLACK)
- (1) MODEL #4854 - 8" ADA ACCESS RAMP (BLACK)
- ALL ANCHORED WITH 3/4" X 30" GALVANIZED STEEL STAKES AT EACH END.

ADA ACCESSIBLE SAFETY SURFACING:
- 1,580 SQUARE FEET REQUIRED
- GTIMPAX ENGINEERED WOOD FIBERS
- 8" COMPACTED DEPTH
- SINGLE LAYER OF GEOTEXTILE FABRIC.
- TERRAFLOW DRAINAGE SYSTEM.
- (2) RUBBER WEAR MATS TO BE PLACED BENEATH WOOD FIBER AT SLIDE EXITS.
- 8' MAXIMUM FALL HEIGHT

SCALE

1 5 10 15

EQUIPMENT LIST

ITEM	QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION
1	1	GAMETIME	CUSTOM	POWERSCAPE PLUS PLAY STRUCTURE FOR AGES 2-5 OR 5-12
2	2	GAMETIME	28009	TUFFCLAD 6' BENCH WITH BACK IN-GROUND MOUNT

THE PLAY COMPONENTS IDENTIFIED IN THIS PLAY AREA ARE IPEMA CERTIFIED. THE USE AND LAYOUT OF THESE COMPONENTS CONFORM TO THE REQUIREMENTS OF ASTM F1487-01.

City of Rockville
Silver Rock Park
Montgomery County
Ages 2-5 Area

THE ESTIMATED CAPACITY FOR THIS POWERSCAPE PLUS PLAY STRUCTURE IS 50-55 CHILDREN AGES 5-12

PROVIDED BY:

WEST RECREATION, INC.
P.O. BOX 487
QUEENSTOWN, MD 21658
PHONE: (800) 233-0529
FAX: (410) 827-8855

No.	Revision	Date

This play equipment is recommended for children ages 2-5 .

Soft, resilient surfacing should be placed in the use zones of all equipment, as specified for each type of equipment, and at depths to meet the critical fall heights as specified by the U.S. consumer Product Safety Commission, ASTM standard F 1487 and Canadian Standard CAN/CSA-Z-614.

GameTime — A PLAYCORE COMPANY — Enriching Childhood Through Play. ISO 9001 CERTIFIED

Drawn By: JLO	Scale: AS SHOWN
Date: 06/02/06	
Drawing Name: P05-0451BR.dwg	